

It starts with a soft blur at the edge of the view. By the time you notice it properly, the inside faces of your double glazed unit look foggy, sometimes with freckles of moisture. You wipe the glass, but it doesn't change. That's the telltale sign the seal around your insulating glass unit has failed, letting humid air creep in between the panes. People often ask whether misted double glazing repairs are worth it, or if they should simply replace the whole window. The answer rests on parts you rarely see: the spacer bar and the perimeter seals.

I have replaced hundreds of failed units in homes from 1930s semis to modern apartments. The basics hardly change. If the seals and spacers do their job, the unit stays clear for decades. If they don't, you get condensation, draughts are more likely around the sash, and your heating bill creeps up. Understanding these components will help you decide when to repair, when to replace, and how to avoid repeat failures.

What a double glazed unit actually is

Most homeowners think of double glazing as "two panes with a gap." That's right, but the assembly matters. A standard insulating glass unit, or IGU, is made of two sheets of glass separated by a spacer bar. The spacer keeps a consistent cavity, usually 12 to 20 millimetres. The perimeter is sealed with adhesive sealants. The cavity is dehydrated with a desiccant inside the spacer, and often filled with an inert gas like argon to reduce heat transfer. The entire unit sits inside a frame, uPVC, timber, or aluminium, secured with glazing beads and occasionally a packer system.

The unit itself is a sealed product, not generally designed to be opened, cleaned internally, and reassembled. That means when it mists, you are rarely servicing the glass face. The real work focuses on replacing the failed IGU, or on more involved repairs that restore the moisture barrier and thermal performance.



Why mist forms in the first place

Moisture inside an IGU is the symptom; the cause is air ingress. The spacer bar runs around the edge, filled with desiccant granules. Initially, those granules absorb trace moisture trapped during manufacture. If the perimeter seal remains intact, the desiccant sits mostly unused for years. If the seal fails, outside air seeps in, the desiccant saturates, and the next cold morning you see mist or streaks. The fog clears when the cavity warms, then returns as conditions change, a cycle that degrades the unit further.

I often get calls after a cold snap, or a heatwave followed by rain. Thermal expansion and contraction stresses the perimeter. Installations in dark frames exposed to direct sun can see the cavity pressure increase, flexing the sealant. Buildings near busy roads receive constant vibration, which can fatigue brittle seals. Cleaning fluids sprayed at the edges, especially high solvent products, sometimes attack the sealant on older units. Sometimes the culprit is simply age. Expect 10 to 20 years from a typical unit, more if the manufacturer used high-quality materials and the installation was careful.

Spacer bars, the unsung heroes

Everyone notices the glass, few notice the spacer. Yet the spacer dictates cavity depth, reduces thermal bridging at the edge, and houses the desiccant. Three common types turn up in my work:

- Traditional aluminium spacers: durable and easy to work with, but they conduct heat readily. That often shows as a chill band around the rim, sometimes the starting point for condensation on very cold mornings.
- Warm edge spacers (uPVC, composite, stainless steel hybrids): lower conductivity, so better thermal performance and reduced risk of edge condensation. Many carry the desiccant in a channel or are bonded with flexible sealants that handle expansion better.
- Structural silicone spacer systems: less common in residential retrofit, excellent for durability and movement, but typically seen in commercial curtainwalls.

When a unit fails prematurely, the spacer type often features in the diagnosis. Aluminium spacers in a north-facing, shaded room can hold up fine. Put that same spacer in a south-facing black aluminium frame, and the daily thermal stress can push the seal to its limit. Warm edge spacers narrow that risk and usually give a few extra years of service. They also shave a few watts off the window's U-value at the edge, which you feel as less "cold ring" in winter.

The seals that keep everything honest

A standard IGU uses a dual seal approach. An inner primary seal, usually polyisobutylene (PIB), creates the gas-tight layer and initial moisture barrier. Over that sits a structurally stronger secondary seal, often polysulfide or polyurethane. Some systems use silicone as the secondary, particularly where UV exposure is high. The pair work together. PIB is excellent at blocking moisture and gas, but too soft to hold the assembly together alone. The secondary seal provides mechanical strength and long-term adhesion to glass and spacer.

In the field, I look for signs of seal degradation. If you see a black or grey line along the edge looking ragged, or you find beads of sticky residue, that suggests the secondary seal is failing. If the misting is intermittent and early, the PIB may still be holding some line but microscopic leaks are letting humidity in. Once desiccant saturates, the game is up for that unit.

Can you fix blown double glazing?

Yes, but "fix" means different things depending on expectations. The phrase "blown" usually means the perimeter seal has failed and the cavity is compromised. There are three paths:

- Replace the IGU with a new sealed unit fitted into your existing frame.
- Attempt a de-mist service, which vents, dries, and re-seals the unit in-situ.
- Replace the entire window including the frame.

The first path, a like-for-like IGU replacement, is what most homeowners choose. It restores clarity and thermal performance, lets you upgrade to warm edge spacers or low-e coatings, and maintains the look of the frame. It takes about 30 to 90 minutes per window in typical uPVC or timber beads, longer for bonded or silicone-glazed units.

The second path, in-situ de-mist services, split opinion. The process drills small holes through one pane, flushes the cavity with a drying solution or dry air, then plugs the holes with vents. The glass will usually clear after a few days of warm weather. But you must accept that the unit is no longer gas-filled, the desiccant is not renewed throughout the spacer, and the edge seals remain aged. Some vents work for a couple of years. I have seen them

fog up again after a wet winter. For listed buildings where changing glass specs is difficult, or when budgets are tight, it can buy time. If long-term performance matters, a new sealed unit is the honest solution.

The third path, full window replacement, only makes sense if the frames are rotten, warped, or letting in water, or if you want to change style or size. When frames are sound, swapping glass alone is kinder on the wallet and less disruptive.

How a proper IGU replacement gets done

People worry that replacing glass is messy. Done right, it's straightforward and clean. A technician first checks sizes, glass specification, and glazing method. On uPVC, the beads clip out with a thin blade and a chisel, then the old unit lifts out. On timber, you may have putty, pins, or beads. Good installers cut caulk, preserve beads, and avoid splitting timber. Aluminium systems often use pressure plates and gaskets.

The frame should be cleaned, old packers removed, and drainage channels checked. This step is often skipped, and it is why some windows mist early a second time. If the weep holes are blocked, water can sit against the seal edge. With new packers set to square the sash, the replacement unit sits in, beads click back, and any gaskets or silicone seals are reinstated. On timber, a fine bead of paintable sealant and a light pass with matching paint can make a 20-year-old window look fresh.

An anecdote from last winter: a client had three misted panes in a bay. The uPVC frames looked fine at a glance, but the central mullion's drainage holes were blocked with spider webs and debris. The old units showed signs of water pooling at the bottom edge, with corrosion on the spacer. We cleared the channels, fitted new warm edge argon units with a 16 millimetre cavity, and the bay not only cleared, it felt less draughty. The client called two months later to say the room needed one fewer hour of radiators each evening. That is what good detailing at the edge can achieve.

Warm edge spacers versus aluminium in practice

Switching to warm edge spacers during a replacement is usually a marginal cost increase, often less than 10 to 15 percent per unit. Homeowners sometimes ask if it is worth it. I look at three factors: exposure, comfort, and condensation risk. South or west facing dark frames, especially aluminium, benefit strongly. Bedrooms and bathrooms benefit because of moisture load and where people sit and sleep. If you have had black mold at the sash corners in winter, warm edge can help by lifting that edge temperature. It is not a cure-all for poor ventilation, but it removes one trigger point.

From a numbers perspective, the overall U-value improvement can be modest across the entire pane, maybe a few hundredths of a W/m^2K , because the edge is a small proportion of the total glass. But comfort is not linear. People feel cold spots acutely. If you reduce the cold edge effect by even a few degrees, the room feels more even. I don't push warm edge on every job, but I recommend it in rooms that see more use.

The desiccant's quiet workload

Inside the spacer is a desiccant, often a molecular sieve. It absorbs moisture that enters during manufacturing and any trace ingress over time. The capacity is finite. Once saturated, any new moisture has nowhere to go. Then the dew point inside the cavity rises and mist becomes visible at normal living temperatures. This explains why a unit can look fine for years, then cycle quickly from occasional fog to permanent mist.



A quick check in the field: if you see mist that forms first around the corners, where the spacer network meets, that often indicates the desiccant along that path is saturated. Even with a warm day, the corners stay milky. If the moisture is patchy and moves around, the cavity is taking on new air and the desiccant is in its final stretch. Either way, you are beyond a cosmetic issue.

Gas fill and low-e coatings are part of the story

When replacing a misted unit, ask about two specifications:

- A low-e coating on one inner surface, usually a soft coat, that reflects heat back into the room and lowers U-value.
- An argon fill in the cavity, which further slows conduction.

Both were likely in your original units if they were installed in the last 10 to 15 years, but not always. The cost uplift for argon and soft-coat low-e is small compared to the lifespan benefits. If you have large south-facing windows, consider a low solar gain glass in that location to balance summer overheating with winter heat retention. For small replacement jobs, suppliers sometimes try to standardize one glass spec to simplify ordering. Push politely for the right spec in the right room.

Misted double glazing repairs versus replacing frames

Some homeowners feel pressure to replace entire windows after misting, especially if a salesperson tells them frames are “past it.” I have pulled out uPVC frames from the late 1990s that were still structurally sound. The beading grew brittle, sure, but a careful hand kept it intact. Timber frames can go fifty years if kept painted and the sills are sound. Aluminium, unless corroded or suffering thermal break damage, rarely needs replacement simply because an IGU failed.



Look for these cues: warped sashes that don't latch correctly, water ingress around the frame to wall junction, rotten sills that flex under light pressure, broken thermal breaks, or persistent draughts despite new seals. Those justify a frame replacement. If you see none of that, a new IGU will probably do the job.

The economics: what to expect

Costs vary by region and glass size. As a rough guide, a small casement unit might run £80 to £150 supplied and fitted in the UK, more for toughened safety glass or large fixed panes. Warm edge spacers add **Cat Flap Installation** a few pounds. Low-e and argon are commonplace and should not double the price. In-situ de-misting tends to cost £50 to £120 per pane, sometimes cheaper if doing several at once. But remember the trade-off: you might postpone replacement by 12 to 36 months, sometimes less, while losing some thermal performance.

If you are replacing multiple panes, ask your contractor to survey all windows. It often makes sense to group work and save on site visits. In a row of identical sashes, if one fails due to a certain stress pattern, its neighbors might follow within a year or two, especially in bays or sun-exposed elevations.

Installation quality still matters

I have seen excellent units fail within five years because of installation shortcuts. Conversely, modest units last fifteen years or more because someone took care with packers, drainage, and sealant compatibility. Watch for a few basics during the work:

- Packers placed at quarter points under the unit to distribute weight and keep the sash square, not just a wedge at the bottom corner.
- Clear drainage and ventilation paths in the frame and the glazing rebate, especially on uPVC where weep holes can clog.
- Compatibility between frame sealants and unit edge seals. Some solvents attack polysulfide; a good installer knows the right products and sequences.
- Tight, even beading. Rattling beads create vibration, which stresses seals over time.

You might not want to hover over the crew, but a short conversation before they begin sets the tone. Ask how they plan to protect floors and sills, how they will deal with stuck beads, and how they will ensure drainage is clear.

Edge cases: heritage, shaped panes, and privacy zones

Not every job is a square uPVC sash. In period houses, you may have timber glazing bars and small panes. Modern IGUs can be manufactured as slimline units, often 12 millimetres overall thickness, with a narrow warm edge spacer colored to mimic putty lines. They are more delicate and demand careful installation. Expect higher cost and longer lead times. Gas fills in very slim cavities are less reliable, so the emphasis shifts to low-e coatings and tight seals.

Shaped panes, arches, and trapezoids add complexity. Curved spacers exist, but some manufacturers segment the spacer around curves, which can create more junctions and potential stress points. If you have a misted shaped unit, choose a fabricator with a track record in special shapes, not just the cheapest quote. For bathrooms, consider obscured low-e glass, and pay attention to ventilation as a second line of defense against condensation, especially around the frame.

DIY or hire a pro?

Replacing a beaded uPVC IGU is within reach for a competent DIYer with glazing paddles, a putty knife, and patience. The risks include cracked beads, nicked gaskets, and chipped glass edges if you rush. Timber brings the added challenge of paintwork and the temptation to over-seal, which can trap water in the rebate if you block drainage. Aluminium demands the right gasket profiles and sometimes special clips.

If you attempt DIY, measure carefully: width, height, and the exact cavity size between panes. Many fabricators stamp spacer bars with spec codes. Photograph the spacer and the edge to help your supplier match low-e position and safety glazing requirements near doors and low sills. If you are unsure about a safety requirement, err on the safe side and consult local building regs. Cracked toughened glass is not something you want to discover mid-install.

Preventing repeat misting

You cannot halt time, but you can stack the odds. First, keep weep holes clear. A vacuum with a narrow nozzle does wonders. Second, avoid harsh solvents at the glass edge, particularly on older units. Third, fix excessively tight blinds that press against the glass in hot sun. The additional heat can stress the edge seal. Fourth, vent moisture at the source in kitchens and bathrooms. A good extractor that actually vents outside, not just recirculates, relieves pressure on all your glazing.

Finally, when you replace, specify warm edge spacers in high-stress locations, and insist on a reputable fabricator. A small workshop that double seals its units and pressure tests gas fill can outperform a high-volume shop cutting corners. Ask about warranties, but value real fabrication quality over a glossy brochure promise. I prefer a five-year warranty from a shop I trust over a "lifetime" warranty with exclusions that cover every plausible failure.

A practical way to decide your next step

Homeowners often want a simple answer to a simple question: do I repair or replace? If the frame is sound and you want the performance back, a new IGU is the sweet spot. If the budget is tight and you accept a shorter horizon, a de-mist can hold the line for a while. If multiple sashes stick, draughts persist, or water shows up around the frame, consider full window replacement.

For those weighing Double Glazing Repairs across a whole house, tackle rooms where comfort matters first, like living spaces and bedrooms, then move to lesser used rooms. If a chilly edge drives you mad every winter, specify

warm edge spacers. If summer glare is your problem, discuss a selective coating that reduces solar gain only where needed.

Real-world examples from the trade

A bungalow on a coastal road: salt air and vibration from passing lorries were the culprits. The aluminium spacers corroded slightly at the corners, and the PIB line showed crazing. We replaced six failed units with stainless warm edge spacers. Five years later, they are still clear. The key was choosing spacers that resist corrosion and ensuring the beading was refitted tight to reduce rattle.

A Victorian terrace with timber sashes: the owner had misted lower sashes in the front room. The glazing putty had hairline cracks, letting water sit against the edge. We switched to slimline IGUs with a flexible secondary sealant and used a breathable paint system on the putty. The space felt warmer, and the lower rail stopped showing mold spots. The timber needed gentle handling and proper ventilation, not a bath of silicone.

A modern flat with floor-to-ceiling aluminium windows: multiple panes misted after a heatwave. The original units used aluminium spacers, and the frames were black, fully exposed. We specified warm edge, low-e, and ensured the pressure plates were torqued evenly. The tenant reported fewer cold drafts near the glass and less radiated chill when sitting close. Not a laboratory test, but the change in comfort was obvious.

Final thoughts for homeowners planning Misted Double Glazing Repairs

When you strip away marketing and myths, two parts do the heavy lifting: the spacer bar and the seals. They regulate edge temperature, control moisture, and hold your gas fill. Get those right and your view stays clear, your rooms feel more even, and your heating system breathes easier.

For anyone asking, Can you Fix Blown Double Glazing, yes, but choose the right level [Misted Window Repairs](#) of repair. If you want a long-term cure that restores both clarity and efficiency, replace the IGU with a well-made unit using warm edge spacers and a reliable dual-seal system. If you are managing costs and can live with a compromise, a de-mist service can buy time. And if you are eyeing bigger changes, weigh the condition of your frames honestly before committing to a full window replacement.

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In the end, good Double Glazing Repairs hinge on the details that are easiest to overlook. Spend a few extra minutes on specification, a bit more care clearing drainage, and insist on craftsmanship at the edges. Your windows will reward that attention every cold morning when the glass stays clear and the room feels calm, not chilly.